PTO/SB/08A (08-00)
Approver use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

heet	i	of	6

Complete if Known				
Application Number	10/075,073			
Filing Date	February 13, 2002			
First Named Inventor	William Glen Harter, et al			
Group Art Unit	-1645 162U			
Examiner Name	Unknown			
Attorney Docket Number	A0000428-01-CFP			

			U.S. PATENT DOCU	IMENTS	
xaminer nitials*	Cite No.1	U.S. Patent Document  Kind Code <sup>2</sup> (If known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	(an) Pages, Rolumns, Lines, When Relegant Pagsages or Relevant Figures uppear
TVT		5,948,780	Peterson, Jr., et al	09/07/1999	514/255
	1/	6,008,243	Bender, et al	12/28/1999	514/422 7
	1/	5,403,843	Akimoto, et al	04/04/1995	514/258 56 6
$\neg$		5,284,661	Morimoto, et al	02/08/1994	424/464 C 3
	11	5,817,819	Furuya, et al	10/06/1998	346/114 2
	1/	5,521,181	Meyer, et al	05/28/1996	514/249 70 20
	:/	6,166,019	Meyer, et al	12/26/2000	3191000010
$\neg \neg$	./	5,334,596	Hartman, et al	08/02/1994	514/301 8 8
1	W	4,835,157	Press, et al	05/30/1989	514 /258
11/1	V	5,792,767	Meyer, et al	08/11/1998	514/249
					2
					- Canada Cara Cara Cara Cara Cara Cara Cara C

				FOR	IGN PATENT DOCUMENTS	S		
Examiner Cite		Foreign Patent Docum	nent Kind Code <sup>5</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant		
initials*	No.1	Office <sup>3</sup>	Number <sup>4</sup>	(if known)	Applicant of Cited Document	MM-DD-YYYY	Figures Appear	T6
7N1	i/ /	√wo	01/63244 A1		Chen, et al	08/30/2001		
7	://	wa	97/07119		Furuya, et al	02/27/1997		
	1/	wd	98/54116		Castelhano, et al	12/03/1998		
	1/	wo	96/22991		Meyer, et al	08/01/1996		
	1/	wa	95/28405		Furuya, et al	10/26/1995		
	1/	wa	92/20687		Chakravarty, et al	11/26/1992		
	V	wd	00/61583		Klein, et al	10/19/2000		
	V	wa	00/04027		Meyer, et al	01/27/2000		
77/	V	wa	98/49899		Atherall, et al	11/12/1998		1
		ΕP	0 530 537 B1		Akimoto, et al	01/08/1997		

Examiner Signature	11 Im	Date Considered	6/	22/04

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (08-00)

Approve to use through 10/31/2002, OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

#### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

$\overline{}$			
Sheet	2	of	6

C mpl t if Known					
Application Number	10/075,073				
Filing Date	February 13, 2002				
First Named Inventor	William Glen Harter, et al				
Group Art Unit	-1645 1624				
Examiner Name	Unknown				
Attorney Docket Number	A0000428-01-CFP				

				U.S. PATENT DOCU	IMENTS	0.47
Examiner Initials*	Cite No.1	U.S. Pater Number	Kind Code	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
						£ 2
						CENTER
						160
						Ö
						18001290
						•
					<u> </u>	
				` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `		
						<u> </u>
				<u> </u>		
				1		

				FOR	EIGN PATENT DOCUMENTS	\$		
Examiner Cite		Foreign Patent Docum	ent Kind Code <sup>5</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant		
Initials"	No.1	Office <sup>3</sup>	Number <sup>4</sup>	(if known)	Applicant of Cited Document	MM-DD-YYYY	Figures Appear	1e
TNT	V	EP	0 443 568 A1		Morimoto, et al	08/28/1991		
	V	EP	0 443 568 B1		Morimoto, et al	06/12/1996		
	1	EP	0 492 316 A1	i	Akimoto, et al	07/01/1992		
	<i>i/</i>	EP	0 502 725 A2		de Laszlo	09/09/1992		
	V	EP	0 530 537 A1		Akimoto, et al	03/10/1993		
	1/.	EP	0 416 740 A2		Smith, et al	03/13/1991		
	V	EP	0 297 661 B1		Janssens, et al	09/16/1992		
	5//	EP	0 438 261 A2		Akimoto, et al	07/24/1991		
	17	EP	0 297 661 A1		Janssens, et al	01/04/1989		
7NT	1/	EP	0 282 133 B1		Janssens, et al	07/28/1993		

Examiner	110	Date	1 9704
Signature	- arm	Considered	6-220-

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. \* Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (08-00)
Approver or use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE ction of information unless it contains a valid OMB control number

Under the Paperwork Reduction Act of 1995, no persons are required to resp Substitute for form 1449A/PTO

### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet of

Complete if Kn wn					
Application Number	10/075,073				
Filing Date	February 13, 2002				
First Named Inventor	William Glen Harter, et al				
Group Art Unit	4645 1624				
Examiner Name	Unknown				
Attorney Docket Number	A0000428-01-CFP				

				U.S. PATENT DOCU	IMENTS			
Examiner Initials*	Cite No.1	U.S. Paten Number	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DO-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	CONTENTON	
	•							
			-		<del></del>		帚	_
		:	<del>-  - -</del>			•		_
							왕	
						<del>-</del>	<b>18</b>	
		<del>,</del>			+		号	_
				·····				_
								_
					<del></del>			-
								_
				<del></del>				_
			<del>  -</del>					_
			<del></del>		<del>                                     </del>			

				FORE	IGN PATENT DOCUMENT	S		
Evaminas	Cite		Foreign Patent Docum		Name of Patentee or Applicant of Cited Document	Date of Publication of	Pages, Columns, Lines, Where Relevant	Т
Examiner Initials*	No.1	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)		Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	Te
M		EP	0 282 133 A2		Janssens, et al	09/14/1988		_
·MI		JР	5-213956	<b>*</b>	Japanese Language	8/24/1993		
7M		wo	96/24597		Furuya, et al	08/15/1996		
						ļ		4
		<del>  -</del>		$\dashv$		<del> </del>		+-
		<del>   </del>	•			<del> </del>		+-
		<del>   </del>						$\top$
				_				

Examiner	110~	Date	102-011
Signature	1//23	Considered	6-2009

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistent Commissioner for Patents, Washington, DC 20231.

Counder strucheres in JP 5-213956 on

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this bo Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08B (08-00)
Approved or use through 10/31/2002. OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

of

(use as many sheets as necessary)

C mpl te if Known 10/075,073 **Application Number** February 13, 2002 **Filing Date** William Glen Harter, et al First Named Inventor -1645 16 2e1 **Group Art Unit** Unknown Examiner Name Attorney Docket Number A0000428-01-CFP

Sheet

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Examiner Cite Initials' No. publisher, city and/or country where published. MONTANA, John, et al, "The design of selective non-substrate-based matrix metalloproteinase inhibitors" Current Opinion in Drug Discovery & Development, 2000; 3(4), pp 353-361, TV CLARK, Ian, et al, "Matrix metalloproteinase inhibitors in the treatment of arthritis", Current Opinions in Anti-inflammatory & Immunomodulatory Investigational Drugs, 2000; 2(1), pp 16-25 , CHEN, James, et al, "Structure-Based Design of a Novel, Potent, and Selective Inhibitor for MMP-13 Utilizing NMR Spectroscopy and Computer-Aided Molecular Design", J. Am. Chem. Soc., 2000, 122; pp 9648-9654 HIROTA, Kosaku, et al, "Synthesis of 6-Substituted Thieno[2,3-d]pyrimidine-2,4(1H,3H)-diones", J. Heterocycl. Chem., 1990; 27(3); pp 717-721 RAJAPPA, S., et al, "Synthesis of Thiophenes: Part III\* - Further Variations in the Substitution Pattern", Indian J. Chem., Vol. 12, 1974; pp 1-3 HCAPLUS Abstract 1998: 542760; "Preparation of bicyclic-substituted hexahydrobenz [e] isoindoles as a1 adrenergic antagonists" 11998. HCAPLUS Abstract 1990: 514925; "Pyrimidines. 65. Synthesis of 6-substituted thieno [2,3-d] pyrimidine-2 1990. 4(1H,3H) - diones" HCAPLUS Abstract 1974: 463420: "Synthesis of thiophenes. III. Further variations in the substitution pattern" , 1974. Derwent Abstract 2000-687031/67, "New xanthine derivatives are inhibitors of cellular processes mediated by interleukin-12 for treating inflammatory responses e.g. chronic inflammatory disease, chronic intestinal inflammation, arthritis, psoriasis and asthma (Eng)", 2-0700, Derwent Abstract 92-415690/50, "New Pyrimidinone derivs. are angiotensin II antagonists - for treating hypertension, congestive heart failure, renal failure, Alzheimer's disease, amnesia schizophrenia etc (Eng)" 1992 -Derwent Abstract 92-302020/37, "New fused pyrimidone derivs. - are angiotensin II antagonists to treat hypertension, congestive heart failure, Alzheimer's disease, amnesia, anxiety, schizophrenia, etc. (Eng)" >

Date Examiner Considered Signature

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

•	$\overline{}$
lease type a plus sign (+) inside this bo	+

Sheet

PTC/SB/08B (08-00)
Please type a plus sign (+) inside this bo

+ U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Compl t if Kn wn Substitute for form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

10/075,073 **Application Number** February 13, 2002 **Filing Date** William Glen Harter, et al First Named Inventor 1645 **Group Art Unit** Unknown **Examiner Name** 

Attorney Docket Number A0000428-01-CFP of

	_		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS						
	Examiner Initials*		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
1	741		Derwent Abstract 91-254180/35, "New angiotensin-II antagonising fused thiophene derivatives - used for treating hypertension and circulatory diseases including heart diseases and stroke", 1991.						
		V	Derwent Abstract 89-192246/26, "New 3-piperidinyl:alkyl-thieno: or furo pyrimidine-2.4-di:one cpds useful as seratonin antagonists and alpha adrenergic blockers", 1989.						
		_	Derwent Abstract 2000-195023/17, "New ipiperazinyl pyrimidine dione derivatives used as selective alpha-1D adrenoceptor antagonists for treating benign prostatic hyperplasia, hypertension, detrusor instability and incontinence (Eng)" , 2000.						
		v	Derwent Abstract 2001-158207/16, "New piperazinyl pyrimidine dione derivatives are selective alpha-1D adrenoceptor antagonists used for treatment of e.g. hypertension"						
			Derwent Abstract 96-362624/36, "New bi:cyclic substd. hexa:hydro-benz-isoindole derivs are alpha-1 adrenergic antagonists, used in treatment of benign prostatic hyperplasia (Eng)", 1996.						
		V	Derwent Abstract 89-008928/02, "New bi:cyclic heterocycle substd. hexa-hydro-1H-azepine - and pyrrolidine cpds., have anti-histaminic properties, for treatment of e.g. allergic rhinitis, allergic asthma, etc." 1989.						
		./	Derwent Abstract 88-258874/37, "New 1-alkyl substd. benzimidazole derivs having anti-histaminic activity and used for treating allergic diseases such as allergic asthma", 1988.						
		V	Derwent Abstract 91-216939/30, "New condensed heterocyclic glutemic acid derivs., - active against enzyme using folic acid and antitumour agents for treating e.g. leukemia", 1991.						
		J. 2	Derwent Abstract 99-080786/07, "New thiophene- and pyrrole-based hetero-aromatic compounds - are (ant)agonists of cell surface receptors, useful e.g. for inhibiting unwanted cell growth e.g. due to cancer (Eng.)" 1999.						
		V	Derwent Abstract 97-165234/15, "New thieno-pyrimidine derivs. are endothelin antagonists useful for treating e.g. acute renal failure, cardiac infarction, liver insufficiency, organ hypo-function and vasoconstriction (Eng)", 1997						
-	TWY	V	Derwent Abstract 96-384384/38, "New 2,4(1H, 3H)-di:oxo-5-(aminoalkyl)thieno(2,3-d)-pyrimidine derivs are gonadotropin-releasing hormone antagonistic agents useful in prevention and treatment of sex hormone dependent diseases (Eng)", 1996?						

Examiner	110	Date	1122/04
Signature	Mom	Considered   G	0/00/01
Oignature			

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

					o persons are required to r						
	Substitu	or tor ex	rm 1449B/PT	U		Application Number		10/075,073			
INFORMATION DISCLOSURE						Filing Date		February 13, 2002			
PM	STA	TEN	MENT !	RY A	PPI ICANT	First Named Inventor	Wi	lliam Glen Harter,	et al		
e. A	STATEMENT BY APPLICANT					Group Art Unit 1645					
(S)		(us	(use as many shee		as necessary)	Examiner Name		Unknown			
9 2002	Sheet		6	of	6	Attorney Docket Number	r ,	40000428-01-CFP			
PE											
` \\						NON PATENT LITERATUR					
0 2002	Examiner Initials	Cite No.1	iten	clude na n (book,	magazine, journal, serial, s	TAL LETTERS), title of the article or ymposium, catalog, etc.), date, pa , city and/or country where publish	ige(s), volume-is:	te), title of the sue number(s),	ER		
DEMARKIN	M		Derwent A treating hor	bstract rmone	95-382760/49, "Fused related cancers, benign	bicyclics as gonadotropin re prostatic hypertrophy, acne	leasing hormo vulgaris, etc. (	one antagonists - used (Eng)", 1995,	<b>1900/23</b>		
		1	Derwent A	hstract	93-299636/38, "New o	condensed heterocyclic oligo storage stability in cells"	-glutamate de	rivs used as water	8		
		1 1	chorlocarci	noma,	93-078155/10, "New a leukaemia, breast aden also rheumatism (Eng)	ntitumour condensed pyrimi ocarcinoma, squamous cell c "; (993 -	dine derivs carcinoma, lun	for treating g cancer, lympho			
		1	Derwent Abstract 92-218561/27, "Antitumoural condensed heterocyclic oligo:glutamate derivs for treating leukaemia, squamous cell carcinoma, lymphatic sarcoma, small cell cancer of the lung etc. (Eng)", 1992								
			Derwent Abstract 96-267825/27, "New hexa:hydro benz(e)isoindole cpds are useful in treatment of beniging prostatic hyperplasia (Eng)" 196-								
		1/	Derwent A	bstract tagonis	94-248420/30, "Furancets, inhibit blood platele	o- and thieno- (3,2-c)piperido et aggregation, used in throm	one carboxam bi and emboli	ido-acids - are fibring treatment:	gen 24,		
			Derwent Al hypertensio	ostract n, cong	91-075241/11, "Hetero gestive heart failure; re	ocyclic peptide derivs. useful tro-viral diseases and central	as renin inhib nervous syste	itors - in the treatment m disorders" 194	nt of		
	M		HCAPLUS adrenergic			paration of heterocyclyl-subs	tituted benz[3]	lisoindoles as x1			
•			-								
•		$\prod$									

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.